Combined Lower John Day WSA Fires
Emergency Fire Rehabilitation Plan and
Environmental Assessment
OR-054-01-023

INTRODUCTION

During a three-week period of August, 2000, the Dipping Vat (N414), Harmony (N411), Rose Briar (N412) and White Elephant Complex (N914) fires burned on public lands in the northern portion of the Prineville District (Refer to Maps I & II). This Emergency Fire Rehabilitation Plan (EFR) Plan and Environmental Assessment (EA) will address these fires which burned approximately 9500 acres on both public and private lands. Portions of these fires burned areas of the Lower John Day Wilderness Study Area (WSA) and five grazing allotments. Dozer line transgressions occurred in five active grazing allotments and seven livestock fences were consumed in the fires.

I. PURPOSE AND NEED

The fire occurred in a big sagebrush/bunchgrass vegetation community with scattered juniper trees. The burned areas are dominated by native perennial bunchgrasses.

On the White Elephant Fire, five discrete locations of surface disturbance occurred consequent to fire suppression activity within in the WSA (See Map I, page 2). A total of approximately 8600 linear feet of new dozer line were constructed and 1900 linear feet of previously existing but uninventoried 2-track was impacted for a total of 10500 linear feet of surface disturbance. Widths of dozer lines vary greatly from approximately 12 to 40 feet, but average approximately 15 feet wide. The two-track routes do not vary greatly in width, averaging approximately eight feet.

On the Dipping Vat Fire, two discrete areas of surface disturbance occurred including both dozer line construction and the vehicular use of un-inventoried ways. A total of approximately 1250 linear feet of new dozer line were constructed and 1550 linear feet of 2-track were impacted for at total of 2800 linear feet of surface disturbance. During post-fire mop-up operations, a small amount of hand crew rehabilitation was performed. Dozer line and two-track surface disturbance on this fire totals approximately 6.0 acres and 0.8 acres, respectively.

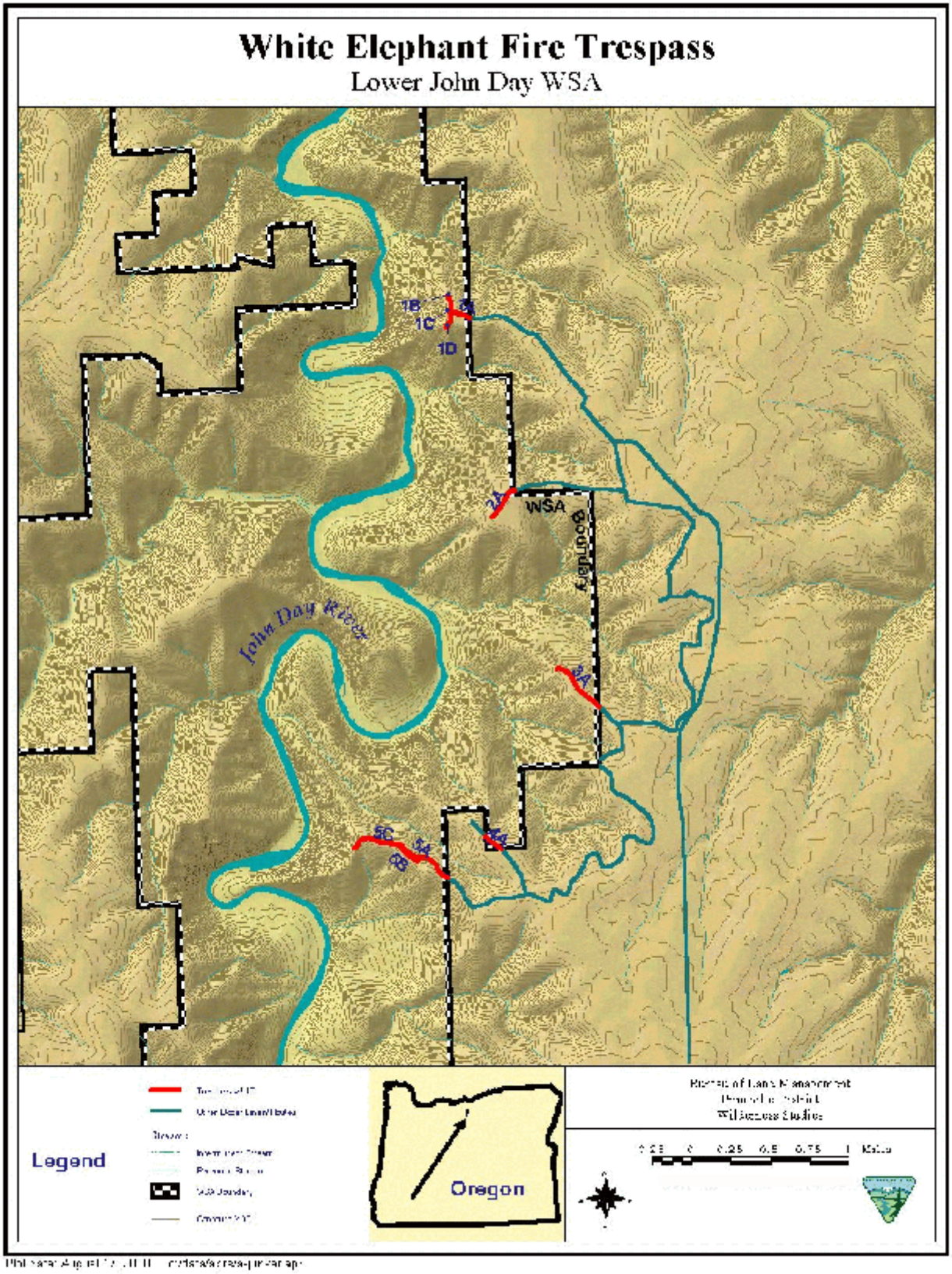
Total surface disturbance within the WSA is approximately 6.8 acres. Approximately seven miles of livestock control fencing was destroyed in the fires (See Map II, page 3).

Some of the surface disturbances are likely visible from portions of the John Day Wild and Scenic River. Left untreated, such viewshed scars may detract from the natural qualities of the WSA and establish an unprecedented modern human imprint to public lands visitors, particularly boaters.

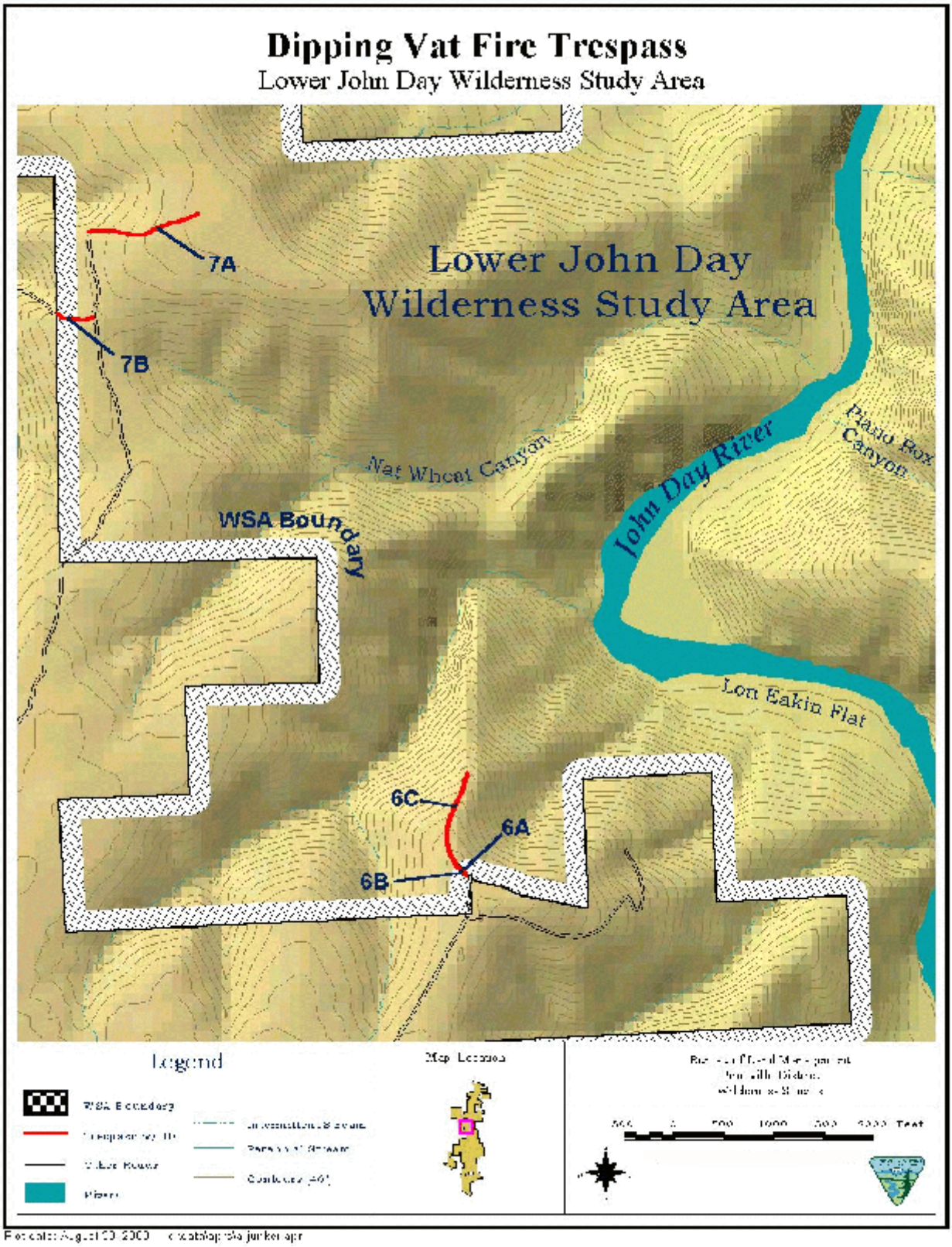
By establishing native perennial grasses to create as much cover and soil stabilizing vegetation as possible, the amount of water-caused soil erosion would be reduced. The proposed action would potentially enhance forage and browse for wildlife species and decrease the intensity and frequency of future wildfires. In addition, the allotment boundary fences, damaged by the fire, need reconstruction to protect the burn area from livestock grazing for the recovery of existing native, perennial vegetation and the establishment of the proposed seeded species.

II. RELATIONSHIP TO PLANNING

The proposed action is consistent with the Two Rivers Resource Management Plan and Record of Decision, dated June 1986, and the Interim Management Policy for Lands Under Wilderness Review (IMP), BLM Manual H-8550-1, dated July 1995. In addition, the portion of the proposed action within the Lower John Day WSA was described in the Oregon Wilderness Environmental Impact Statement (Final), Volume II, dated December 1989. The WSA was further described in the Wilderness Study Report, Volume I, dated October 1991.


White Elephant Fire Trespass
Lower John Day WSA
1B
1C
1D
2A
WSA
Boundary
John Day River
3A
4A
5C
5A
5B
Legend
Oregon

Map I


Dipping Vat Fire Trespass
Lower John Day Wilderness Study Area
Lower John Day
Wilderness Study Area
7A
7B
6C
6A
6B
WSA Boundary
Nat Wheat Canyon
John Day River
Plano Box
Canyon
Lon Eakin Flat
Legend
Map Location

Map II

III. DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES

A. Proposed Action

1. Dozer Line and Two-Track Rehabilitation

Approximately 9700 liner feet (3.7 acres) of dozer line will be rehabilitated using lightweight mechanized equipment including a small trail tractor and all-terrain vehicles. Rehabilitation will include the breaking down and distribution of berms created by dozer blading and the scarification of topsoil with a harrow tyne attachment which will facilitate seeding described in section 2. Additionally, to minimize soil erosion, water bars will be constructed at 30 foot intervals of elevation change and angled at 30-45 degrees towards the outslope. The maximum allowable water bar cut-fill height difference will not exceed fourteen inches and the maximum developed run out distance will not exceed twenty-four inches. Two-track routes will be harrowed and seeded with the use of rubber tire all-terrain vehicles.

2. Seeding

The rehabilitation of approximately 6.8 acres of dozer lines and two-track roads within the Lower John Day WSA would be addressed with a seeding and harrow tyne treatment. Two-track routes would first be seeded with the use of an electric seeding device and the seed subsequently worked into the soil with the use of a harrow tyne device attached to an all-terrain vehicle. Both the dozer line and two-track surface disturbances would be seeded according to the mix schedule described in Table A. Burned areas not affected by fire suppression activities will not be seeded due to the prevalence of native perennial bunchgrasses.

Table A. Proposed Seeding Volumes

Species	Upland Mix (lbs/acre)
Bluebunch Wheatgrass (*Agropyron spicatum*, cultivar Secar)	3.0
Bluebunch Wheatgrass (*Agropyron spicatum*, cultivar Whitmar)	3.0
Sherman Big Bluegrass (*Poa ampla*, cultivar Sherman)	3.0
Thurber Needlegrass (*Stipa thurberiana*)	2.0
Idaho Fescue (*Festuca idahoensis*, cultivar Joseph)	2.0
Total:	13.0

3. Fences

Approximately 7.0 miles of existing fence would be reconstructed to protect the seeded areas from livestock and to reestablish an allotment boundary fence between private land and the Lower John Day WSA along with keeping cattle from the John Day River. Such reconstruction would use the specifications for a four-strand fence with considerations for deer, elk, antelope and bighorn sheep movements. The top three wires would be barbed and the bottom wire smooth with a spacing of 18", 23", 28" and 40" respectively, from ground up. Posts would be steel, gray colored, and spaced one rod apart (16.5 feet) with a wire stay inserted halfway between each post. Corner posts and rock cribs would be constructed to Bureau specifications (See specification sheet at end of this document).

4. Springs

Two existing, developed springs would be reconstructed to maintain the livestock management system which was in place before the burn occurred. The spring would be reconstructed to closely resemble its original condition

including collection system, pipe, trough with a fence surrounding the water source. Designated ways would be used for access.

B. Alternatives

1. Reconstruct the fences as stated in the Proposed Action, but do not rehabilitate or seed dozer lines.

2. No Action. Do not reconstruct the damaged fences or rehabilitate and seed selected burn areas.

IV. EVALUATION AND ANALYSIS

A. Affected Environment

1. <u>Water and Soil</u>

The important aspects of post-fire hydrology are typically water retention and water quality. High intensity burns associated with heavy fuel loads result in hydrophobic soil conditions which may decrease infiltration rate and limit water holding capacity. The alteration of these parameters result in the inability of the burned area to absorb rainfall and overland flow may increase. Upland fuel loads were light and the subsequent burns low intensity, thus, fire-induced hydrophobic characteristics are minimal.

From a soil and water standpoint, cover is imperative. Immediate revegetation of the bulldozed sites would 1) increase interception, 2) shorten the time for reintroduction of litter which will increase water holding capacity, and 3) reduce rain droplet kinetic energy prior to soil contact. In addition, upland revegetation is the most effective manner to reduce potential sediment recruitment.

The soils disturbed along trespasses 1A, 1B, 1C, 1D, 2A, 4A, 5A, 5B, 5C, 7A, and 7B (see Maps I & II) are identified in the Soil Survey of Sherman County Oregon (1964) and the Soil Survey of Gilliam County Oregon (1984) as the Lickskillet-Rock outcrop complex. This complex occurs on upland south facing slopes. Lickskillet soil is dark brown, very stony loam and about three inches thick. The subsoil is dark brown, very gravelly loam and very gravelly clay loam about twelve inches thick. It is underlain by fractured basalt. The permeability of the Lickskillet soil is moderate with an effective rooting depth of 12-20 inches. The available water capacity is one to three inches and the water supplying capacity is two to five inches. Runoff is rapid and the hazard of erosion is high.

The soils disturbed along trespasses 2A, 3A, 6A, 6B, and 6C (see Maps I & II) are identified in the Soil Survey of Sherman County Oregon (1964) and the Soil Survey of Gilliam County Oregon (1984) as the Wrentham-Rock outcrop complex. This complex occurs on upland north-facing exposures with an average slope of fifty percent. Wrentham soil has a surface layer of very dark brown silt loam about eighteen inches thick. The subsoil is a dark brown, very gravelly silt loam about 15 inches thick and is underlain by basalt. The permeability of the Wrentham soil is moderately slow with an effective rooting depth of 20-40 inches. Available water capacity is 2.5 to 7 inches and the water supplying capacity is six to eight inches. Runoff is rapid and hazard of erosion is high.

Soils disturbed along trespasses 4A, 5A, 5B, and 5C (see Map I) are identified by the Soil Survey of Gilliam County Oregon (1984) as being the Wrentham-Rock complex and the Bakeoven-Condon Complex. These soils occur on ridgetops with an average slope of five percent. This complex is approximately fifty percent Bakeoven complex and thirty percent Condon complex (this soil type also includes ten percent each of the Valby and Lickskillet soils) and occur in patterns known locally as “biscuit scabland.” The Bakeoven soil is scabland between and around the areas of Condon soil. If the slope is less than ten percent, the Condon is on circular mounds, or biscuits, that have a convex surface and are deeper in the center than on the edges. Where slope is greater than ten percent, the Condon soil is on elongated mounds in which the long axis is parallel to the slope. The circular mounds are 20-50 feet in

diameter and are 20-40 feet apart. The elongated mounds are 100-300 feet long and 30-60 feet wide.

Typically, the surface layer of the Bakeoven soil is a dark brown and very cobbly loam about four inches thick. The subsoil is a dark brown and very cobbly loam and very cobbly clay loam about 6 inches thick and is underlain by basalt. The permeability of the Bakeoven soil is moderately slow. Available water capacity is 0.5 to 1.5 inches and the water supplying capacity is less than 2.5 inches. Runoff is slow to medium and the hazard of erosion is moderate.

The surface layer of the Condon soil is typically a dark brown silt loam approximately seven inches deep. The upper portion of the subsoil is a very dark greyish brown silt loam approximately seven inches thick and the lower portion of the subsoil is a dark brown silt loam about 17 inches deep. The Condon soil is underlain by fractured basalt and the permeability is moderate. Available water capacity is 4 to 8.5 inches and the water supplying capacity is seven to nine inches. The effective rooting depth is 20-40 inches. Runoff is slow to medium and hazard of erosion is slight to moderate.

2. Vegetation

Ecological status information for uplands was collected during the late 1970s for the Two Rivers RMP/EIS by the Ecological Site Inventory (ESI) methodology. Overall, condition for the Lower John Day River area is late seral with some mid seral and some climax vegetation. The dominant vegetation types are sagebrush (*Artemisia tridentata wyomingensis*) with bluebunch wheatgrass (*Agropyron spicatum*) and Idaho fescue (*Festuca idahoensis*). Ridges tend to have shallow soils that support stiff sagebrush (*Artemisia rigida*) and Sandberg's bluegrass (*Poa sandbergii*). Cheatgrass (*Bromus tectorum*) tends to invade areas of disturbance. Dalmation toadflax (*Linaria dalmatica*) is a noxious weed that has been expanding in the canyon and poses a particular threat on disturbed soils.

3. Wildlife

Species observed in the Lower John Day River area include elk, bighorn sheep, mule deer, coyote, bobcat, Canada geese, mergansers, mallard ducks, golden and bald eagles, chukar and quail. A complete list of species potentially in the area can be found in the Two Rivers RMP.

4. Special Status Species

a. Wildlife

No specific information on special status animals has been documented. Information has been compiled, however, for species that may occur or are suspected to occur in the area based on recent records, regional data, and county specific documentation. In reference to this data the following special status species would be suspected of occurring in the WSA: Western toad (*Bufo boreas)*, burrowing owl (*Athene cunicularia)*, Ferruginous hawk (*Buteo regalis)*, Swainson's hawk (*Buteo swainsoni)*, loggerhead shrike (*Lanius ludovicianus)*, bank swallow (*Riparia riparia)*, and Western bluebird (*Sialia mexicana)*.

b. Botany

Based on inventory of nearby lands, known habitat, historical records and known populations elsewhere, the following special status plants would be suspected to occur in the area: porcupine sedge (*Carex hystericina*), hepatic monkeyflower (*Mimulus jungermannioides*), sessile mousetail (*Myosurus sessilis*) and Columbia cress (*Rorippa columbiae*).

5. Fences

Approximately 7 miles of boundary fence with wood posts were completely destroyed or partially damaged by the fire. Many of the old barbed wires may have become brittle due to the high heat from the fire.

6. Developed Springs

Two springs developed in the 1920s were partially damaged in the fire.

7. Grazing

Grazing allotments affected by the wildfire are Sid Seale (# 2619), Willow Spring (#2553), Miller (#2591), Dipping Vat (#2631) and Belshe (#2509). The primary impact to all allotments was the damage to livestock control fences and spring developments.

8. Paleontology

The area of proposed rehabilitation is unlikely to contain paleontological resources because the geology of the area is not conducive to preservation. The Columbia River Basalt flows occurred between 17-15 million years ago. Flood basalts do not preserve bone or other subtle features of the prehistoric landscape (i.e., leaves) because of the extreme heat.

9. Cultural Resources

The areas of disturbance and proposed rehabilitation occur on ridge tops overlooking the John Day River canyon. This topographic feature is generally narrow with steep sides. Some cultural inventory has occurred in this type of setting (CRR 88-05-44+). Those few areas within the lower river segment which have been inventoried produced limited results. Types of sites that might occur in such areas include, small discrete flake/tool scatters with little or no subsurface material, rock piles of uncertain origins and function, and temporary historic remains related to farming and ranching. The setting, however, is considered to have low potential for the presence of significant cultural remains. In addition, the BLM knows of no Native American religious sites or traditional cultural properties within or in the vicinity of the proposed project.

10. Climate

The area climate consists of hot summer days, cool summer nights, and winters which are generally not severe. Average winter temperature in Condon is 33 degrees (F). Average summer temperature in Condon is 64 degrees (F). Total annual precipitation is 9 inches in Arlington and 14 inches at Condon. Thirty percent of the precipitation fall between April and September. The 6 hour -2 year event is 0.6" of rainfall and the 2 year-24 hour event is 1.2".

11. Wilderness

The Lower John Day Wilderness Study Area includes 22,020 acres of BLM lands. These lands were studied under Section 603 of the Federal Land Policy and Management Act and alternatives for wilderness designation were analyzed in the Final Oregon Wilderness Environmental Impact Statement (EIS) filed in February of 1990. The EIS recommended that the majority of the WSA be designated as wilderness.

This plan seeks to restore impacts resulting from unauthorized surface disturbances to a pre-existing, natural state and to prevent potential future problems resulting from these disturbances which would impair wilderness qualities of the WSA. Rehabilitation of dozer lines, especially those visible from the John Day River, will improve public land visitors sense of naturalness which is consistent with the general policies of the IMP (pages 7-8).

B. Environmental Impacts of the Proposed Action and Alternatives

1. Proposed Action:

a. Dozer Line and Two-Track Rehabilitation

Some surface disturbances and soil compaction will result from the use of mechanized equipment to remove dozer berms, create water bars, and harrow the treatment areas. However, the amount of impact associated with the proposed action is not considered significant.

b. Seeding

The proposed seeding would be in compliance with the requirements for managing WSAs as directed by the IMP (pg. 38), which allows reseeding in WSAs under emergency conditions utilizing species native to the area and minimizing cross-country use of motorized equipment.

c. Fences

Fence reconstruction is not expected to have any long term environmental impacts. Some soil compaction and vegetation loss would occur along existing fence lines during the construction phase, but these would be short term, less than two years. The fences would be constructed using the wire and post spacings described in III. A of this EA which would reduce impacts to wildlife. All proposed fences will function to control livestock and one fence will serve to exclude livestock from a portion of the eastern bank of the John Day river.

The proposed fencing would be in compliance with the requirements for managing WSAs as directed by the IMP (pg. 41), which allows livestock developments existing or under construction on October 21, 1976, to continued to be used and maintained. Additionally, during fence re-construction within the WSA boundary, vehicle travel would be limited to designated ways.

d. Springs

Spring reconstruction is not expected to have any long term environmental impacts. Some soil compaction and vegetation loss would occur within the spring area during the construction phase, but these would be short term, less than two years. Vehicle travel would be limited to designated ways.

e. Grazing

The grazing lessees in the Sid Seale (# 2619), Willow Spring (#2553), Miller (#2591), Dipping Vat (#2631) and Belshe (#2509) allotments would be asked to refrain from grazing in the seeded areas for a period of two years consistent with the BLM's policy to rest burned and seeded areas for this period of time following a fire.

f. Vegetation

The dozer lines were constructed in areas which would not be considered habitat for the four species previously listed. These lines were generally high up in the canyon and on ridges or near rims, far upslope from the riparian areas where *Juncus torreyi* would likely be found or from the basalt cliffs where *Mimulus jungermannioides* is found. This is also true for the two-track roads used during suppression activities and for the reconstruction of needed fences. Revegetation/rehabilitation of these areas and fence reconstruction would have no effect on these species. Additionally, it must be noted that the habitat for *Mimulus jungermannioides*, by its very nature (basalt cliffs), is immune from most disturbances. Therefore, neither the proposed action nor any alternatives would be likely to affect special status plants.

g. Cultural Resources

It is recommended that the proposed rehabilitation plan be implemented as designed. However, in the event that cultural material is encountered or exposed during implementation of the rehabilitation plan, work in that area should cease immediately and the district archeologist contacted before work resumes.

h. Wilderness

The proposed Dozer Line and Two-Track Rehabilitation, seeding, spring and fence reconstruction would be in compliance with the requirements for managing WSAs as directed by the IMP (pg. 38), which allows emergency treatments to be considered which do not impair wilderness suitability.

Table B. Existing and Proposed Fiscal Expenditures under the Proposed Action:

	Units	FY2001	FY2002
		Obligations	Obligations
Acres of Revegetation	6.8	1,000	
Acres of Surface Rehabilitation	6.8	3,200	
Miles of Permanent Fence	7.0	35,000	35,000
Total Acres Rehabilitated	6.8		
Monitoring		2000	2000
Plan Preparation	N/A	5,000	
Total Planned Dollars ($)			

2. Alternative to Reconstruct Fences and Developed Spring, but Not to Seed and Rehabilitate Dozer Lines

a. Dozer Line and Two-Track Rehabilitation

The lack of any treatment to any portion of the surface disturbances will likely result in loss of topsoil and the possibility of invasion of non-native plants into pioneer locations. The visual impact of untreated dozer lines will likely last many years.

b. Seeding

Perpetuation of annual grasses and weeds that do not provide the soil stability inherent to the native perennial grasses could cause increased hill slope erosion and sedimentation of stream channels.

c. Fences

Fence reconstruction is not expected to have any long term environmental impacts. Some soil compaction and vegetation loss would occur along existing fence lines during the construction phase, but these would be short term, less than two years. The fences would be constructed using the wire and post spacings described in III. A of this EA which would reduce impacts to wildlife. All proposed fences will function to control livestock and one fence will serve to exclude livestock from a portion of the eastern bank of the John Day river.

The proposed fencing would be in compliance with the requirements for managing WSAs as directed by the IMP (pg. 41), which allows livestock developments existing or under construction on October 21, 1976, to continued to be used and maintained. Additionally, during fence re-construction within the WSA boundary, vehicle travel would be

limited to designated ways.

d. Springs

Spring reconstruction is not expected to have any long term environmental impacts. Some soil compaction and vegetation loss would occur within the spring area during the construction phase, but these would be short term, less than two years. Vehicle travel would be limited to designated ways.

e. Grazing

The grazing allotments affected by the wildfire are Sid Seale (# 2619), Willow Spring (#2553), Miller (#2591), Dipping Vat (#2631) and Belshe (#2509). The primary impact to all allotments was the damage to livestock control fences and spring developments.

f. Wilderness

Fence and spring reconstruction would have no adverse effect on the continued suitability of the Lower John Day WSA as wilderness as there will be no net increase in long term evidence of human impacts. However, the lack of any treatment to prevent the loss of topsoil and restore the vegetation to the areas of surface disturbance would not satisfy the non-impairment criteria set forth in Section 603 (c) of the Federal Land Policy and Management Act and the as directed by the IMP (page 2).

3. No Action Alternative

Impacts as identified in 2 (A, B), above, would occur. In addition, without the reconstructed fences, livestock would have unrestricted access to the burned areas. This would result in excessive stress on recovering perennial grasses and may exacerbate erosion in areas of surface disturbance.

Taking no action would result in the degradation of wilderness values, specifically the unique combination of ecosystems (wheatgrass, bluegrass and sagebrush steppe) found in this WSA. Additionally, the lack of any treatment to prevent the loss of topsoil and restore the vegetation to the areas of surface disturbance would not satisfy the non-impairment criteria set forth in Section 603 (c) of the Federal Land Policy and Management Act and as directed by the IMP (page 2).

V. MITIGATION AND STIPULATIONS

None.

VI. NO IMPACT ITEMS

The following items were considered, but will not be addressed because they will either not be affected or do not exist in the project areas.

1. ACEC's
2. Air Quality
3. Water Quality
4. Hazardous Wastes
5. Prime or Unique Agricultural Lands
6. Solid Waste
7. Wetland / Riparian
8. Wild and Scenic Rivers
9. Environmental Justice
10. Flood Plains

VII. RESIDUAL IMPACTS

Cumulative impacts of the proposed action would include vegetative improvements (establishment of non-invasive quality forage plants) and soil stability on public lands within the project areas. Other than those items already addressed in this document, no mitigating measures are required for implementation of the proposed action.

VIII. CONSULTATION/COORDINATION

Lyle Andrews, Range Conservationist
Scott Cooke, Wildlife Biologist
Ron Halverson, T&E Plants
Gavin Hoban, Wilderness Technician
Heidi Mottl, Recreation/Wilderness Specialist
Craig Obermiller, Range Conservationist
Brent Ralston, Fisheries Biologist
Anna Smith, Hydrologist
John Zancanella, Archeologist

/s/ Heidi Mottl	05/15/01	/s/ Danny L. Tippy	05/16/01
Responsible Official	Date	Environmental Coordinator	Date

IX. EMERGENCY FIRE REHABILITATION FORMS

EMERGENCY FIRE REHAB PROJECT SUMMARY
Combined Lower John Day WSA Fires

Fire Name	Combined Lower John Day WSA Fires
Fire Numbers	N914, N414, N411, N412
Fire Control Date	August 14-28, 2000
Acres BLM Burned	7400 acres (approximately)
Start of Rehab (Mo/Yr)	January 2001
Completion of Rehab (Mo/Yr)	June 2002
Miles of New Fence (temporary electric fence)	0.0 miles
Miles of Fence Rebuilt	7.0 miles
No. of Soil/Watershed Structures	0
Acres of Revegetation	6.8 acres
Acres of Burned Area Protected for Natural Regeneration	0 acres
Total Acres Rehabilitated	0 acres
Estimated Funding Current Year (FY00)	0
Estimated Funding Second Year (FY01)	0
Estimated Funding Third Year (FY02)	0
TOTAL REHAB COSTS	0

/s/ Heidi Mottl 05/15/01
Responsible Official Date
Lower John Day Team

Review and Concurrence:

/s/ Christine M. Welch 05/15/01
Christina Welch Date

Field Manager
Central Oregon Field Office

EMERGENCY FIRE REHABILITATION PROCUREMENT INFORMATION
Combined Lower John Day WSA Fires

Seeding

Approximate acreage to be seeded	6.8 acres
Approximate starting date	February 1, 2001
Number of days to complete the work	3 days
Location of seed	Boise, ID, Seed Warehouse / Contract
Start of REHABILITATION (Mo/Yr)	January 2001
Completion of REHABILITATION (Mo/Yr)	June 2002
Miles of New Fence(temporary electric fence)	0
Miles of Fence Rebuilt	7.0
No. of Soil/Watershed Structures	0
Acres Reforestation	0
Acres of Revegetation	6.8
Acres of Burned Area Protected for Natural Regeneration	0
Total Acres Rehabilitated	6.8
Estimated Funding Current Year (FY00)	0
Estimated Funding Second Year (FY01)	0
Estimated Funding Third Year (FY02)	0
TOTAL REHABILITATION COSTS	0

EMERGENCY FIRE REHABILITATION
Modified Cost / Risk Analysis
Combined Lower John Day WSA Fires

Cost Analysis

Treatment	Cost
Revegetation	1,000
Protective Fence	70,000
Berm Removal	1911
Soil / Watershed Structures	0
All Other Costs (admin., clearances, monitoring, etc.)	9,000
TOTAL ($)	81911

Risk Analysis

Probability of Rehabilitation Treatments Successfully Meeting EFR Objectives

Treatments	Units	NA	%
Revegetation (overall rating)	6.8		90
Drill Seeding (acres)		✔	
Aerial Seeding (acres)		✔	
Transplant Seedlings (acres)		✔	
Other: Broadcast seeding, ATV (acres)			90
Protective Fence to Exclude Livestock (miles)		✔	
Fence Repair to Exclude Livestock (miles)	7.0		100
Soil/Watershed Structures (overall rating)		✔	
Retention dams/structures (number)		✔	
Ripping, contour furrows, etc.		✔	
Matting, watershed cover, etc.		✔	
Other		✔	

Risk of Resource Value Loss or Damage

Identify the risk (high, medium, low, none or not applicable (NA)) of unacceptable impacts or loss of resources.

No Action - Treatments Not Implemented (check one)					
Resource Value	NA	None	Low	Mid	High
Unacceptable Loss of Topsoil					✔
Weed Invasion				✔	
Unacceptable Loss of Vegetation Diversity				✔	
Unacceptable Loss of Vegetation Structure				✔	
Unacceptable Disruption of Ecological Processes			✔		
Off-site Sediment Damage to Private Property		✔			
Off-site Threats to Human Life		✔			
Other -	✔				

Alternative 1					
Resource Value	NA	None	Low	Mid	High
Unacceptable Loss of Topsoil					✔
Weed Invasion				✔	
Unacceptable Loss of Vegetation Diversity				✔	
Unacceptable Loss of Vegetation Structure				✔	
Unacceptable Disruption of Ecological Processes			✔		
Off-site Sediment Damage to Private Property		✔			
Off-site Threats to Human Life		✔			
Other -	✔				

Proposed Action - Treatments Successfully Implemented (check one)					
Resource Value	NA	None	Low	Mid	High
Unacceptable Loss of Topsoil			✔		
Weed Invasion			✔		
Unacceptable Loss of Vegetation Diversity			✔		
Unacceptable Loss of Vegetation Structure			✔		
Unacceptable Disruption of Ecological Processes			✔		
Off-site Sediment Damage to Private Property		✔			
Off-site Threats to Human Life		✔			
Other -	✔				

SUMMARY

The costs of the project and probability of success of the proposed treatments are compared with the risks to resource values if: 1) no action is taken, and 2) the proposed action is successfully implemented. Alternatives may be included in this analysis to assist in the selection of the treatments that will cost effectively achieve the EFR objectives. Answer the following questions to determine which proposed EFR treatments should be selected and implemented.

1. Are the risks to natural resources and private property acceptable as a result of the fire if the following actions are taken?

Proposed Action Yes ✔ , No Rationale for answer:
The risks of seeding would be minimal to existing natural resources on public land and none to private lands. The major concerns are the potential for non-native plant invasion into these disturbed areas and soil erosion on some of the steeper portions of dozer line. This action would help maintain vegetation diversity and structure of the areas of surface disturbance and maintain long-term visual integrity to WSA visitors on the John Day river .

No Action Yes , No ✔ Rationale for answer:
The lack of any rehabilitation and revegetation would allow potential establishment of non-native species in the areas of surface disturbance. The reconstruction of damaged fences is needed to protect the burned area and portions of the John Day river by excluding livestock from adjacent private lands. No action may create greater future costs in trying to rehabilitate highly visible, eroded dozer lines; the damage to these areas may increase over time.

Alternative 1 Yes , No ✔ Rationale for answer:
Reconstructing the damaged fences would protect the area from grazing and allow for natural regeneration. However as stated in the No Action alternative, the lack of any rehabilitation and seeding would result in erosion and the unsightly, visible scarring of prominent ridgelines. No seeding may create greater future costs in the loss of wildlife habitat and livestock forage.

2. Is the probability of success of the proposed action, alternatives or no action acceptable given their costs?

Proposed Action Yes ✔ , No Rationale for answer:
If the dozer lines can be rehabilitated and the seed can be broadcast before the end of February the surface erosion and the striking appearance of the scars and will be substantially mitigated.

No Action Yes , No ✔ Rationale for answer:
This alternative would save money now, but may cost more in the future for weed and erosion control as well as the loss of wildlife habitat and livestock forage. Dozer lines, visible from several miles away, would remain for many years and have a deleterious effect on the natural aesthetic of the WSA.

Alternative 1 Yes , No ✔ Rationale for answer:
Same as the No Action Alternative.

3. Which approach will most cost effectively and successfully attain the EFR objectives and therefore is recommended for implementation from a Cost/Risk Analysis standpoint?

Proposed Action ✔ , Alternative , or No Action
Comments: As explained under numbers 1. and 2. above, if the seeding and Dozer Line and Two-Track Rehabilitation can be implemented before the end of February.

/s/ Heidi Mottl 05/15/01
Responsible Official Date
Lower John Day Team

Review and Concurrence:

/s/ Christina M. Welch 05/15/01
Christina Welch Date
Field Manager
Central Oregon Field Office

NATIVE/NON-NATIVE PLANT WORKSHEET
Combined Lower John Day WSA Fires

Proposed Native Plants in Seed Mixture

1. Are the native plants proposed for seeding adapted to the ecological sites in the burned area?
Yes ✔ , No
Rationale: All plants are known to grow within the precipitation zone and soil types that occur in the rehabilitation area.

2. Is seed or seedlings of native plants available in sufficient quantity for the proposed project?
Yes ✔ , No
Rationale: Limited availability of some native seed species have caused prices to rise somewhat as compared to earlier in the year. The quantity needed for this fire rehabilitation plan does not appear to be a concern at this time.

3. Is the cost and/or quality of the native seed reasonable given the project size and Land Use and Rehabilitation Plan objectives and the guidance in BLM Manual 1745?
Yes ✔ , No
Rationale: The quality of the some of the seed has already been determined to be satisfactory by the Interagency Seed Warehouse in Boise, ID. Those species that are not available from seed warehouse will be purchased from other vendors. Once seed is received from vendors and additional seed tests will be performed to determine purity and germination. Prices of native species are modestly high, but reasonable.

4. Will the native plants establish and survive given the environmental conditions and the current or future competition from other species in the seed mix or from exotic plants?
Yes ✔ , No
Rationale: Depending on environmental conditions during the spring and early summer, native plants should become established. Future competition from exotic plants will occur, but similar seedings have shown positive results.

5. Will the current or proposed land management (livestock, recreation use, wildlife populations, etc.) after the seeding establishment period maintain the seeded native plants in the seed mixture?
Yes ✔ , No
Rationale: The selected seed species are currently present at the rehabilitation sites. After establishment, it is expected that current land management practices will not impede the re-establishment of the seedings. The dozer lines and two-track disturbances have been signed as being closed and recreational use in these areas is minimal due to restricted access.

Proposed Non-native Plants in Seed Mixture

1. Is the use of non-native plants necessary to meet objectives, e.g., consistent with applicable land use/activity plans?
Yes , No ✔
Rationale: No non-native species will be seeded.

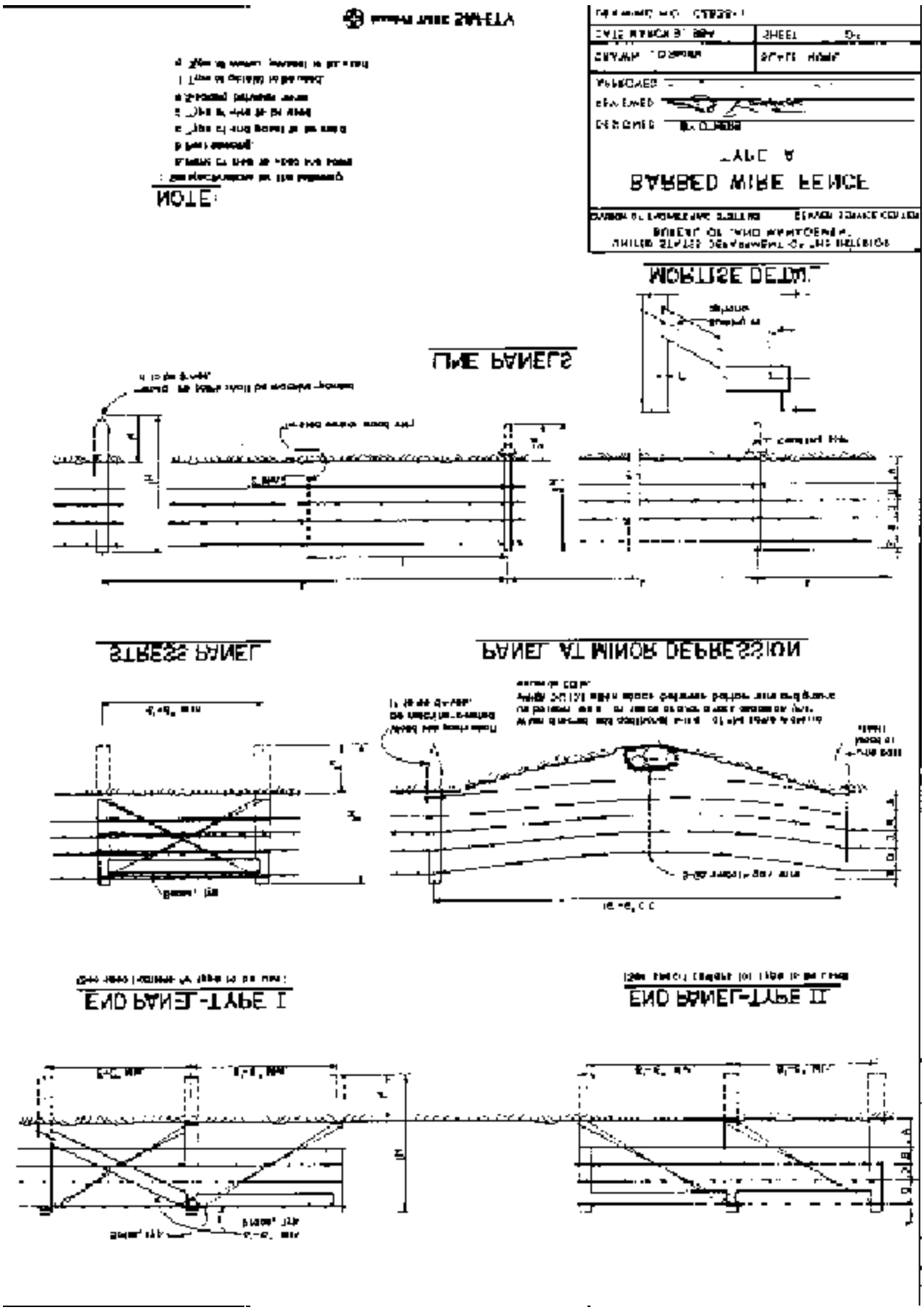
Native Plants:
Thurber Needlegrass (*Stipa thurberiana*)
Bluebunch Wheatgrass (*Agropyron spicatum* var. Whitmar and Secar)
Idaho Fescue (*Festuca idahoensis*, cultivar Joseph)
Sherman Big Bluegrass (*Poa ampla*, cultivar Sherman)

Non-native Plants:

None

Cost Worksheet-Combined Lower John Day WSA Fires

Equipment		
SWECO 1.5 mi.@½ mi./day	Base price + 3 days (30 hours) [$581.00 + 21/hr.(30)]	1211.00
ATV	30 hours @ 10./hr.	300.00
Subtotal Equipment		1511.00
Labor		
SWECO Operator @ 40 hours	GS-7 @ 3 days ($20/hr)	800.00
ATV Operator @ 40 hours	GS-7 @ 3 days ($20/hr)	800.00
Subtotal Labor		1600.00
Materials		
Fencing	7.0 mi @ $10000/mi.	70000.00
Seed	$116.92/acre * 6.8 acres	1000.00
Subtotal Materials		71000.00
Monitoring/Plan Preparation		
Monitoring		4000.00
Plan Preparatioin		5000.00
Project Total		$ 83111.00


BARBED WIRE FENCE
MORTISE DETAIL
LINE PANELS
STRESS PANEL
PANEL AT MINOR DEPRESSION
END PANEL-TYPE I
END PANEL-TYPE II